

REMARKS

Please reconsider the application in view of the above amendments and the following remarks. Applicant thanks the Examiner for carefully considering this application.

Disposition of the Claims

Claims 1-11 are pending in the application. Claims 1 and 6 are independent. The remaining claims depend, directly or indirectly, from claims 1 and 6.

Amendments to the Claims

Claims 1, 2, 4, 6-11 are amended by way of this reply to clarify the claimed invention and to correct minor informalities. Independent claims 1 and 6 are amended, in part, to include the control unit controls the expansion unit “during the n-fold speed reproduction of the compressed video and audio data.” Dependent claims 2, 4, 7 and 8 are amended for consistency. Also, Claim 9 is amended to include “the frames corresponding to the [n-fold, normal, and two-fold speeds] are alternatively and continuously reproduced....” No new matter has been added as support may be found in the original claims and paragraphs [0012] and [0032] of the published specification. Accordingly, entry and favorable consideration thereof is respectfully requested.

Rejection(s) under U.S.C. § 103

Claims 1-11 stand rejected under 35 U.S.C. 103(a) as unpatentable over United States Patent No. 5,787,225 (“Honjo”) in view of United States Patent No. 6,925,042 (“Nakajo”) in further view of United States Patent No. 6,961,510 (“Proidl”) in further view of United States Patent

No. 5,649,047 (“Takahashi”). Independent claims 1 and 6 are amended by way of this reply. To the extent the rejection may still apply to the claims as amended, this rejection is respectfully traversed for the following reasons.

MPEP § 2143 states that “[t]he key to supporting any rejection under 35 U.S.C. 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious. The Supreme Court in KSR noted that the analysis supporting a rejection under 35 U.S.C. 103 should be made explicit.” Further, when combining prior art elements, the Examiner “must articulate the following: (1) a finding that the prior art included each element claimed, although not necessarily in a single prior art reference, with the only difference between the claimed invention and the prior art being the lack of actual combination of the elements in a single prior art reference....” MPEP § 2143(A).

Referring to the specification as an example, embodiments of the claimed invention generally relate to an apparatus and a method for improved continuity of video reproduction. This improved continuity making it easier for a user to grasp the consequences of the image in the case of performing high speed (n-fold) reproduction of MPEG encoded digital video information. (See, Published Specification ¶¶ [0011] and [0012]). Accordingly, amended independent claim 1 recites, in part, “a control unit configured to control the expansion unit, during the n-fold speed reproduction of the compressed video and audio data, to alternatively and continuously reproduce a plurality of frames corresponding to the n-fold speed and a plurality of frames corresponding to one of a normal speed and a two-fold speed when the high speed reproduction key is operated.” Amended independent claim 6 recites similar limitations.

As stated by the Examiner, “Hongo in view of Nakajo fails to disclose the alternating between various speeds of reproduction.” (Office Action, p. 5). It is then alleged that Takahashi provides that which Hongo and Nakajo lack. Applicant respectfully disagrees.

Takahashi is merely directed to the solution of a known disadvantage inherent to inter-frame encoded video data. “[T]he system shown in FIG. 19 also has a disadvantage in that the desired image cannot be obtained during playback in fast forward or fast reverse in which only a part of the image data can be reproduced.” (See, Takahashi col. 2, ll. 18-22)(emphasis added). Takahashi merely teaches reproduction of “compressed image data which has been compressed using inter-frame encoding[,]...taking out the intra-frame encoded image data [and storing this data in memory (See, Takahashi col. 8, ll. 28-34),]...so as to obtain a reproduced video image during playback in fast forward and fast reverse.” (Takahashi, Abstract).

In the claimed invention, however, MPEG format is claimed, and this format is not solely *inter-frame* encoded. (See, Published Specification, Figure 3 and ¶ [0007]). Accordingly, the teaching of Takahashi is of little use for reducing the “extreme frame skip” problem of n-fold speed reproductions inherent to MPEG encoded video. (See, Published Specification ¶ [0009]). Takahashi would, therefore, provide no benefit for one of ordinary skill in the art in an attempt to achieve the claimed invention, regardless of whether combined with Hongo and Nakajo.

Embodiments of the claimed invention reduce the appearance of extreme frame skip during the playback of MPEG encoded video at n-fold speed. Specifically, claims 1 and 6 recite, in part, “a control unit configured to control the expansion unit, during the n-fold speed reproduction

of the compressed video and audio data, to alternatively and continuously reproduce a plurality of frames corresponding to the n-fold speed and a plurality of frames corresponding to one of a normal speed and a two-fold speed....” In contrast, Takahashi merely discloses an apparatus capable of sending the “trick-play” mode signal in addition to the trick-play compressed image data to the image decoding apparatus to ensure proper processing of the data during the trick-play. (*See*, Takahashi col. 8, ll. 2-20). Therefore, Takahashi fails to teach, or even suggest, alternatively and continuously reproducing a plurality of frames corresponding to the n-fold speed and a plurality of frames corresponding to one of a normal speed and a two fold speed, as required by independent claims 1 and 6. Accordingly, Takashi fails to provide that which Hongo and Nakajo lack.

Furthermore, Proidl merely teaches the possibility of high speed reproductions at varying speeds and does not teach employing frames from various speeds of reproduction during an n-fold speed reproduction. Accordingly, Proidl fails to provide that which Hongo, Nakajo, and Takahashi lack. Accordingly, claims 1 and 6 are patentable over Hongo, Nakajo, Takahashi, and Proidl, whether considered separately or in combination.

Dependent claims 2-5 and 7-11 are patentable over Hongo, Nakajo, Takahashi, and Proidl, whether considered separately or in combination, for at least the reasons set forth above. Accordingly, withdrawal of this rejection is respectfully requested.

Conclusion

Applicant believes this reply is fully responsive to all outstanding issues and places this application in condition for allowance. If this belief is incorrect, or other issues arise, the Examiner is encouraged to contact the undersigned or his associates at the telephone number listed below. Please apply any charges not covered, or any credits, to Deposit Account 50-0591 (Reference Number 04995/121001).

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Respectfully submitted,

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